

THE FOOD PLANTS OF THE LEAFHOPPERS OF THE GENUS EXITIANUS.

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This genus was founded by the writer to include a single widely distributed species *E. obscurinervis* Stål. The author's later collections and food plant studies indicate that there are four distinct species of this genus occurring in Arizona, which can be separated by the following key:

- A. Ovipositor definitely exerted extending much beyond the spines on the pygofers.
- B. Ovipositor rarely as long as the elytra. Species rather slender, gray 1. *obscurinervis* Stål
- BB. Ovipositor extremely long, usually longer than the elytra. Species broad, heavily black marked, the males often nearly black 2. *picatus* Gibson
- AA. Ovipositor not extending beyond the spines on the pygofers.
- C. Pale cinereous, the face yellow, the elytra unmarked except for the brown nervures, a pair of black spots on vertex and another pair on the lateral margins of the pronotum.
3. *armus* Ball
- CC. Heavily and somewhat irregularly marked with rich brown above and below, the cross nervures brown margined.
4. *kinoanus* Ball

E. obscurinervis Stål. Osborn has shown that this widely distributed species feeds on Bermuda Grass and spreads from there to other vegetation.

E. picatus Gibson (*miniaturatus* Gibson) has been found almost exclusively on a "five finger" or Crab grass (*Digitaria sanguinalis*), in damp and shaded situations. This species occurs in Hayti, Guatemala, Mexico, and as far north as southern Arizona.

E. armus Ball. This strikingly marked species feeds on the evergreen desert hackberry (*Celtis pallida*) in Southern Arizona and Northern Sonora, Mexico.

Exitianus kinoanus Ball n. sp.

Smaller and narrower than in *armus* with irregular dark brown markings including a pair of large crescents on the basal areas of vertex. Length female 4 mm.; width 1.1 mm.

Vertex scarcely twice wider than long, rounding over to front with a very slight median production. Front wider

below than in *armus*. The elytra narrower than in *armus* with the inner claval veins shorter, but much longer than in *obscurinervis*. The subcosta thickened and corrugated towards the apex. Female segment nearly truncate posteriorly with the median fourth definitely triangularly produced. Male plates broader at the base than in *armus*, then roundly narrowing into long, attenuate, slightly divergent, apices.

Color rusty straw marked with brown, the vertex lighter with a cloud on the margin, a crescent extending from the ocelli back over the disc, emphasized in two pairs of spots. A pair of large round spots on the posterior disc usually emarginate behind. Pronotum irregularly marked with brown the anterior margin lighter with about 6 round spots. Scutellum pale, a pair of round dots on disc, and the larger, subangular areas brown. Elytra, milky subhyaline with brown nervures. The cross nervures and angles broadly marked or clouded. Face dark lined in the female, all dark in the male. The darkest examples have the disc of the elytra, smoky with two or three rows of milky dots.

Holotype female, allotype male, and a pair of paratypes, Gillespie Dam, Apr. 13, '33; four paratypes, Tucson; one Roosevelt Dam; one Baboquivari Mts.; two Bisbee; all in Arizona, and two Kino Bay, Sonora, Mex.; all taken from mesquite by the writer.

A. N. Caudell.—As we go to press, we learn of the death on March 1st of Mr. A. N. Caudell, Curator of Orthoptera in the United States National Museum.—G. P. E.